NEW ABSTRACT

A diversity receiver receives high rate radio signals (for example DVB-T signals) while the receiver is moving at a high speed (for example in or with a car). Two or more antennas are closely spaced and arranged behind each other in the direction of motion for receiving the radio signals. A difference $(S_2(t)-S_1(t))$ of a first signal $(S_1(t))$ obtained via the first antenna and a second signal $(S_2(t)$ obtained via the second antenna serves as an estimation of the spatial derivative of the receiving channel transfer function. This spatial derivative is interpreted as a temporal derivative and exploited to cancel or at least reduce distortions (for example ICI) due to rapid receiving channel variations.